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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/559,712	12/05/2005	Patrick Joseph Collins	8830-376US1	1822

23973 7590 12/24/2008
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EXAMINER

FIGUEROA, JOHN J

ART UNIT	PAPER NUMBER
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1796

MAIL DATE	DELIVERY MODE
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12/24/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/559,712	Applicant(s) COLLINS, PATRICK JOSEPH	
	Examiner John J. Figueroa	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-7,10,12-16,18-23,36 and 37 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,3-7,10,12-16,18-23,36 and 37 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/5/2005 & 5/15/2006</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 3-5 and 36 are rejected under 35 U.S.C. 102(b) as being anticipated by USPN 5,290,768 to Ramsay et al. (hereinafter 'Ramsay').

Ramsay discloses an insulation material for oil drilling applications, such as transporting oil (e.g., hydrocarbon production), comprising a thixotropic (gel) composition that includes ethylene glycol and welan gum; wherein said composition has unique viscosity and thermal properties; wherein the welan gum viscosifies ethylene glycol to the point of eliminating convection flow; and wherein this insulation material is used for maintaining high oil temperature during conveyance within a pipe located in a relatively low temperature environment, such as sea water. (Abstract; col. 1, lines 55-65; col. 2, lines 1-39; Figure 1; Example 1) This insulation material can serve in pipe/metal wrapping application for anti-icing applications in harsh environments. (Col. 2, lines 40-51)

Thus, the present claims are anticipated by Ramsay.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 14-16 and 18-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ramsay in view of USPN 5,417,287 to Smith et al. (hereinafter 'Smith').

Ramsay was discussed above. Ramsey does not disclose the gel composition to further contain a transition metal salt and orthophosphate ester.

However, Smith teaches hydrocarbon gels for use in hydrocarbon production applications containing a gelling agent that provides excellent fracturing results, said gelling agent comprising a ferric salt (transition metal salt) and orthophosphate esters. (Abstract; col. 1, lines 1-12; col. 2, lines 32-47; col. 3, line 24 to col. 4, line 18) Among the advantages of using this gelling agent are its effectiveness in alcohol and in large

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amounts of water; and its stability at broad pH ranges and temperatures. (Col. 2, lines 47-63)

Therefore, it would have been obvious to a person of ordinary skill in the art at the time that the claimed invention was made to include Smith's gelling agent comprising a ferric salt and orthophosphate ester in the gelled-insulation material disclosed in Ramsay. It would have been obvious to one skilled in the art to incorporate said gelling agent to attain a resultant gelled insulation material that is effective in applications involving large amounts of water (subsea production) and in harsh environmental conditions as taught by Smith. It would have also been obvious to encapsulate the insulation material in, for example wax, to protect it from said harsh environment.

Thus, the instant claims are unpatentable over Ramsay and Smith.

Allowable Subject Matter

6. Claims 6, 7, 10, 12, 13 and 37 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The following is a statement of reasons for the indication of allowable subject matter: Although Ramsay and Smith disclose a hydrocarbon producing pipe/conduit comprising the recited insulation material in independent claim 1, the prior art of record does not teach or suggest said hydrocarbon pipe/conduit further comprising multiple conduits or adding microspheres enclosing hydrocarbon gas to said insulation material.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John J. Figueroa whose telephone number is (571)272-8916. The examiner can normally be reached on Monday-Thursday 8:00-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JJF/RPG

/John J. Figueroa/
Examiner, Art Unit 1796

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